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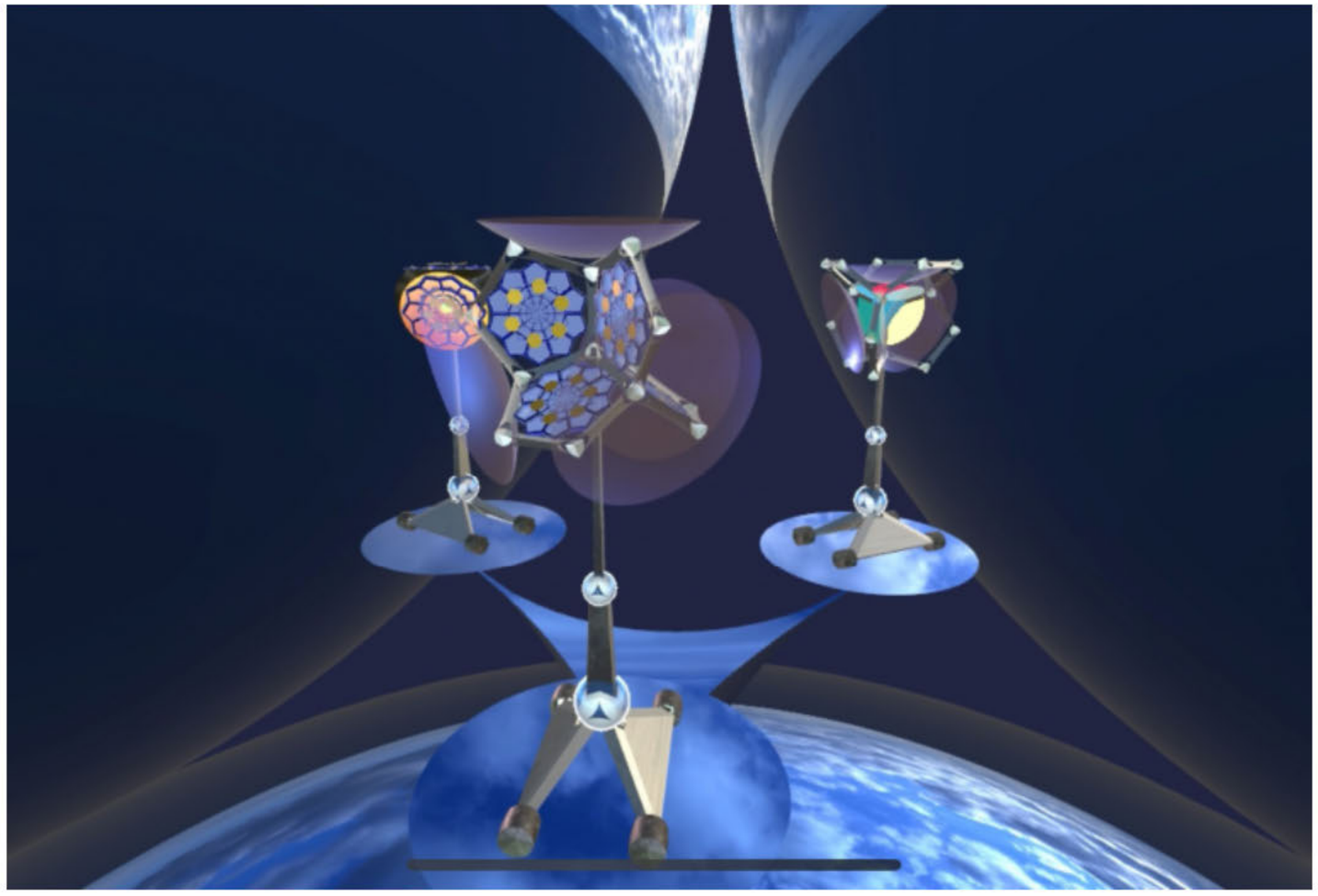

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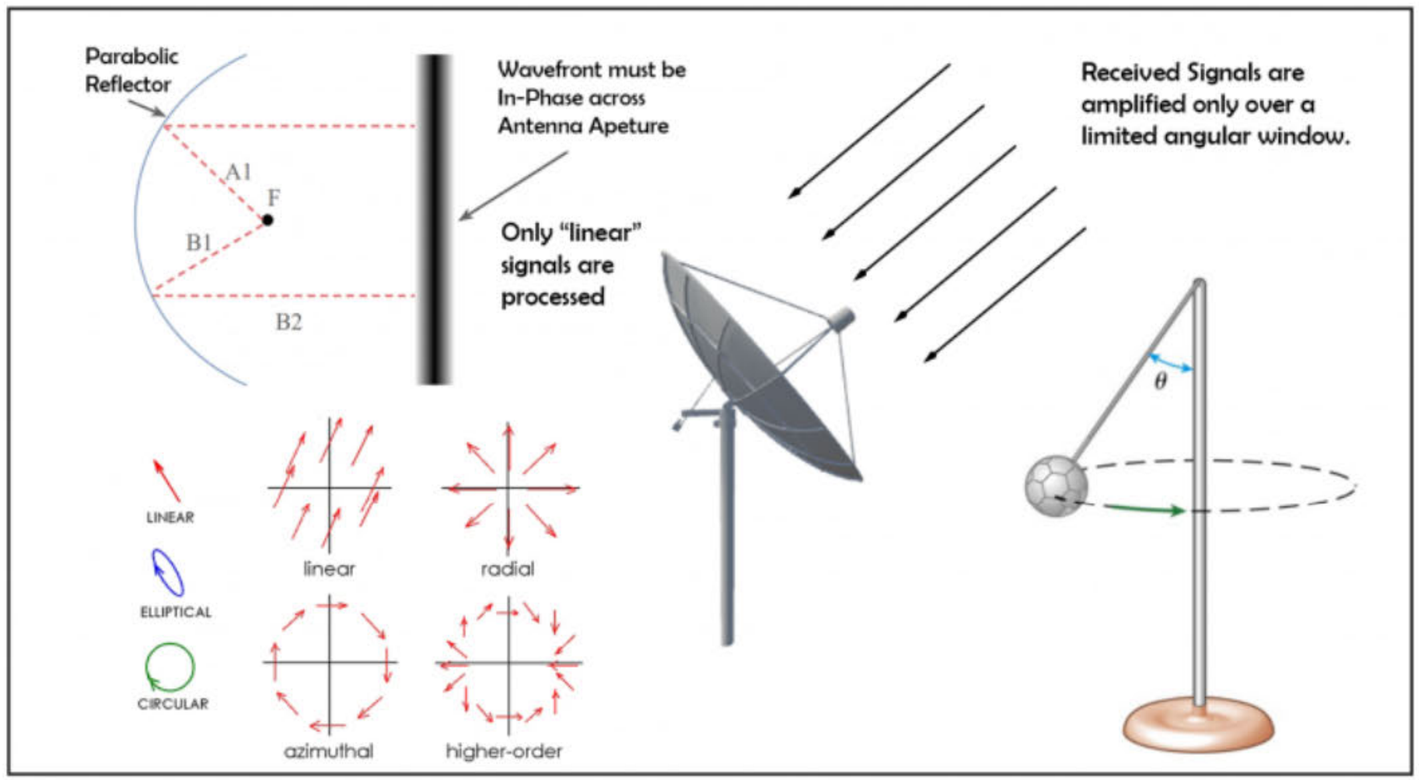

The average satellite dish provides an aperture of 144 degrees. This is typical for two-dimensional telecommunications.

1

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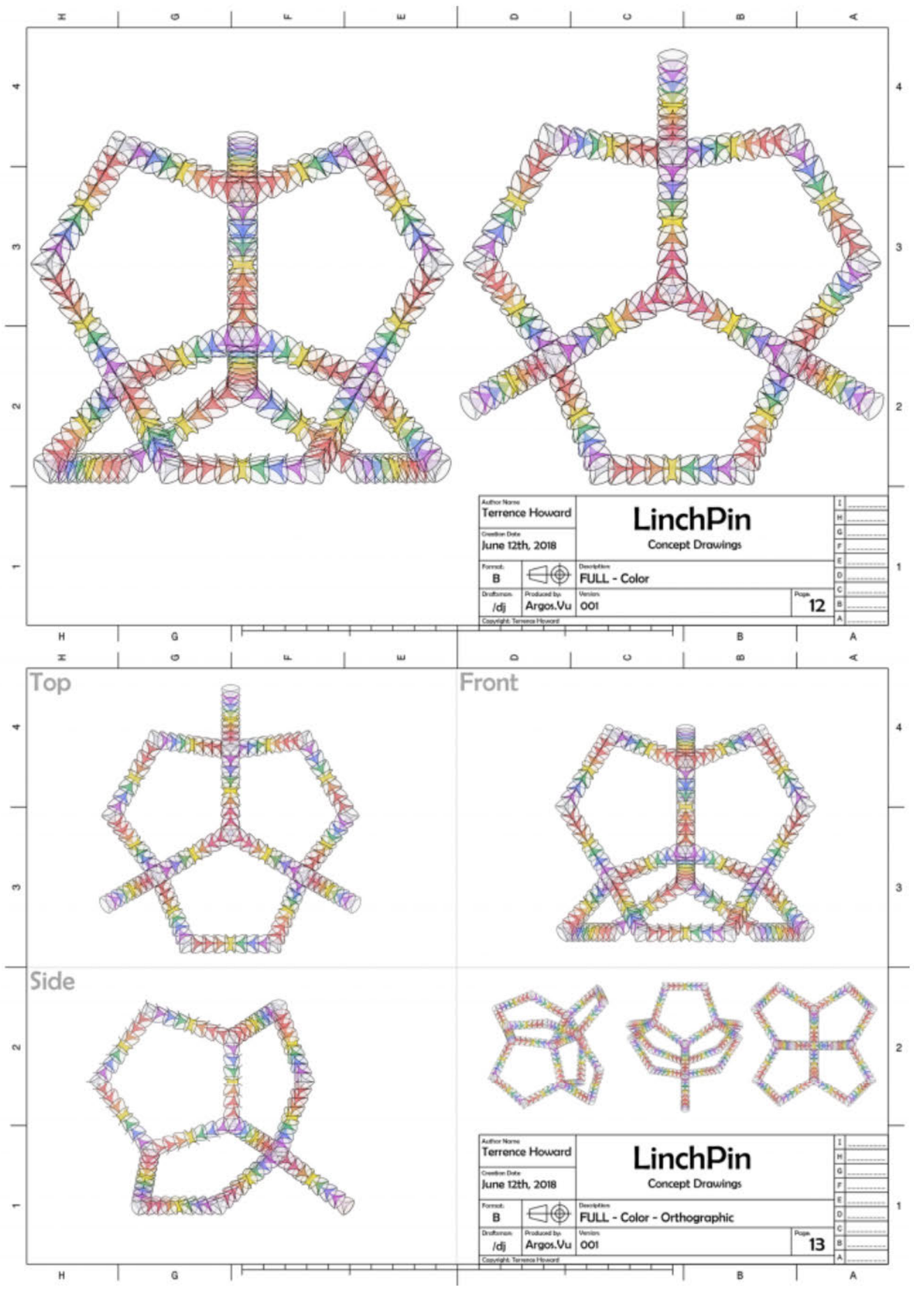

The newly discovered geometry of the LinchPin® offers multi-dimensional applications to the telecommunications industry.

2

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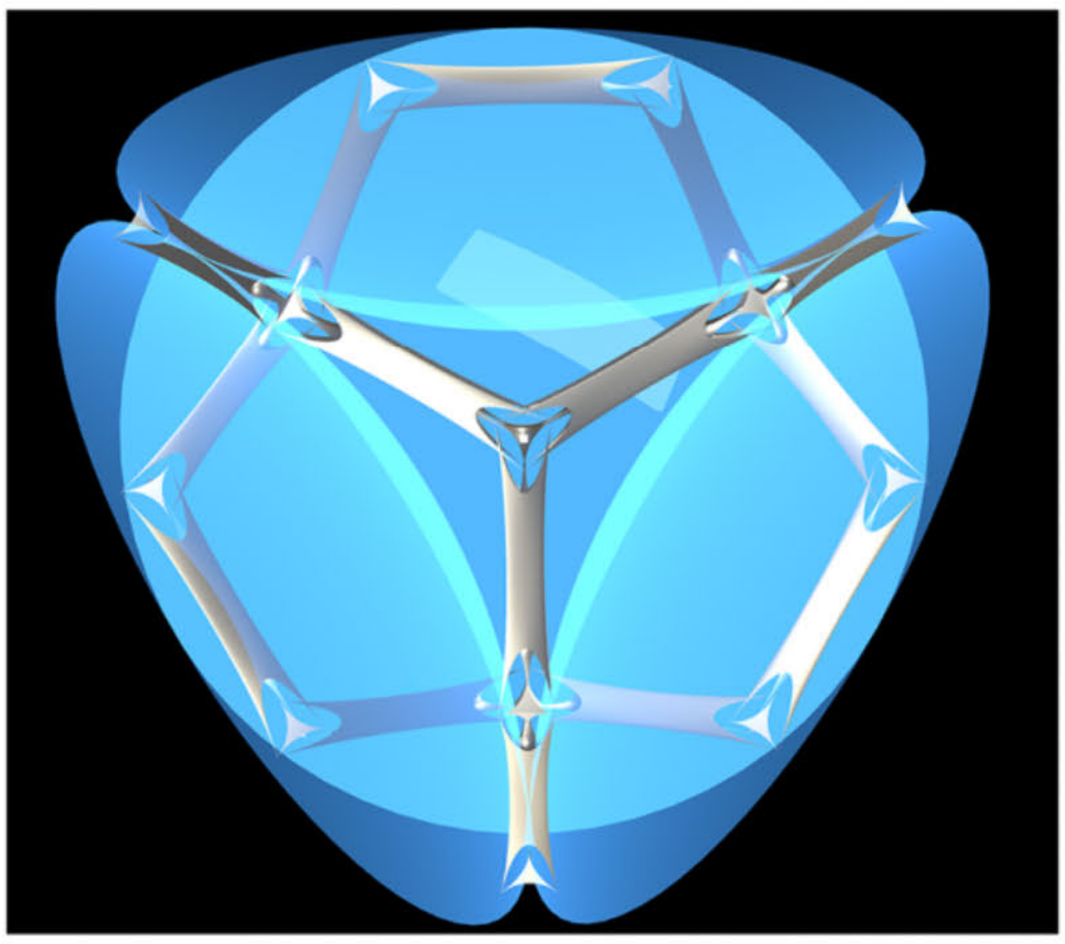

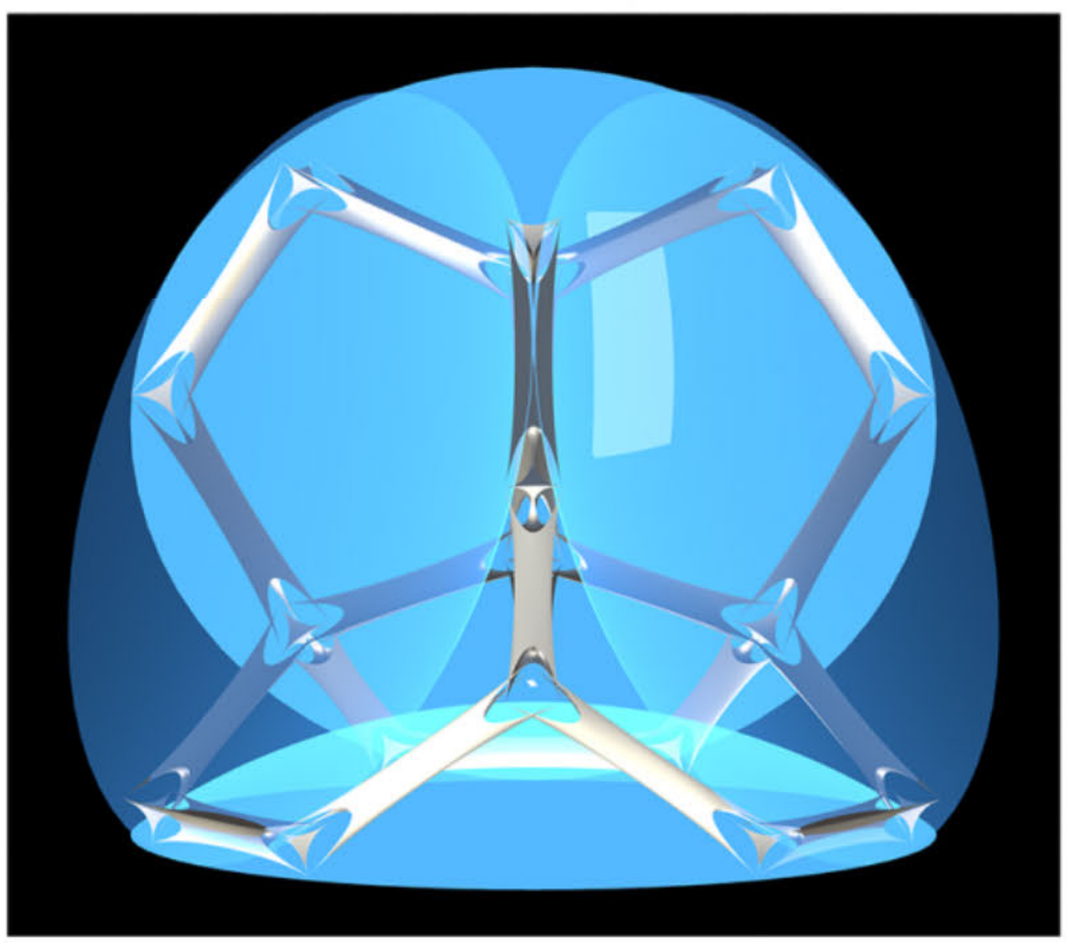

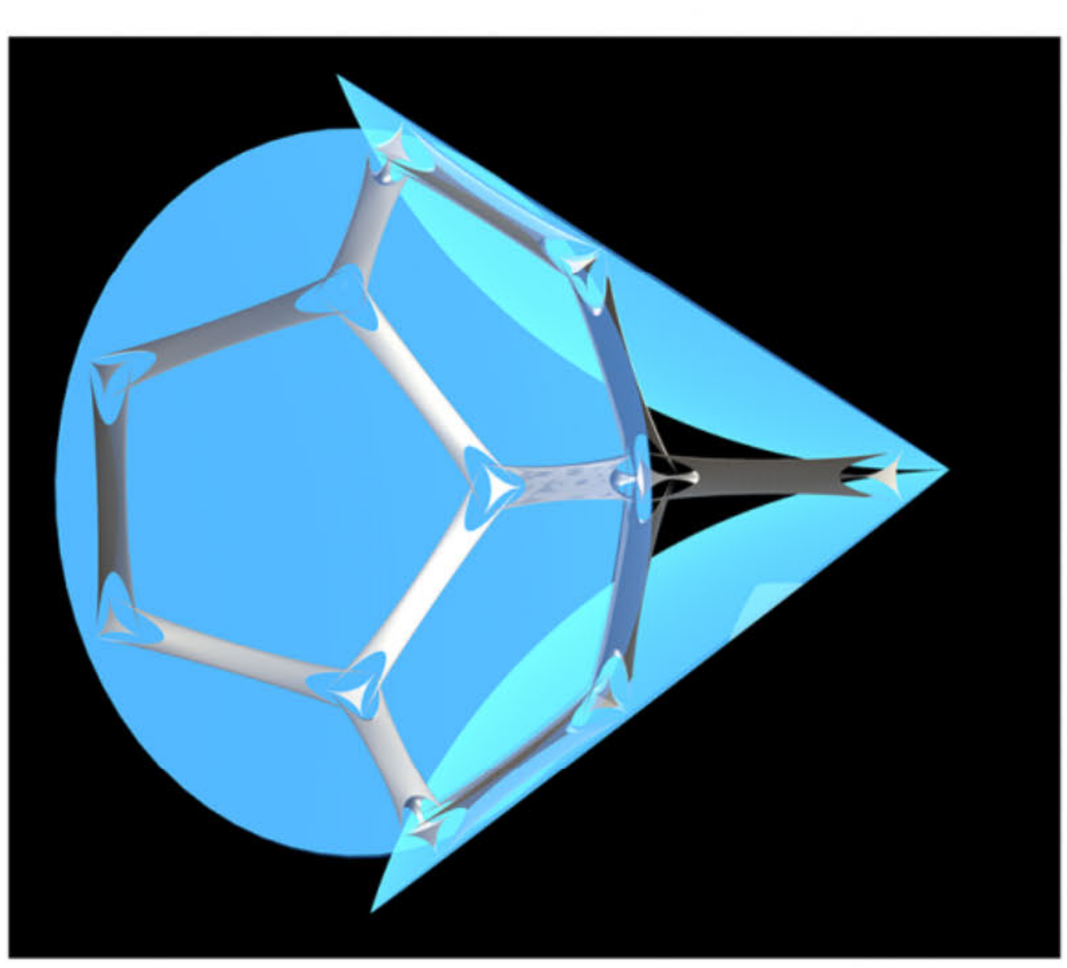

Four dishes mounted within the structure of LinchPin® increases the aperture to 576 degrees.

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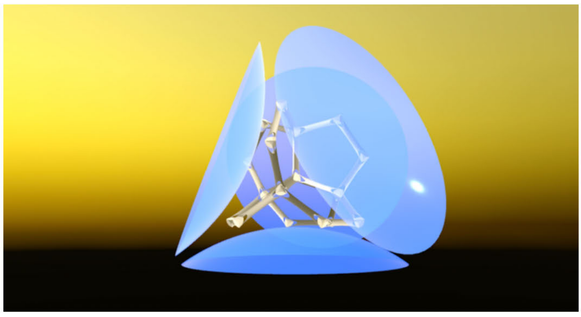

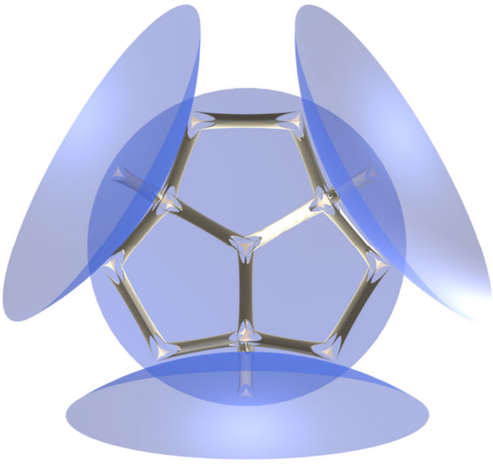

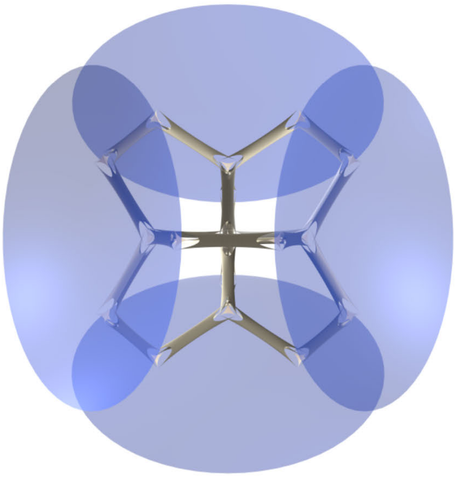

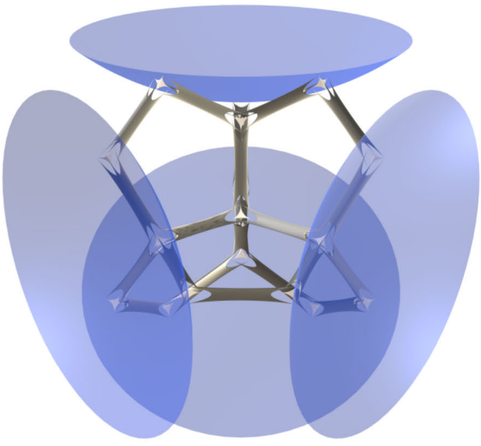

The LInchPIn® has multiple conflgurations and applications.

4

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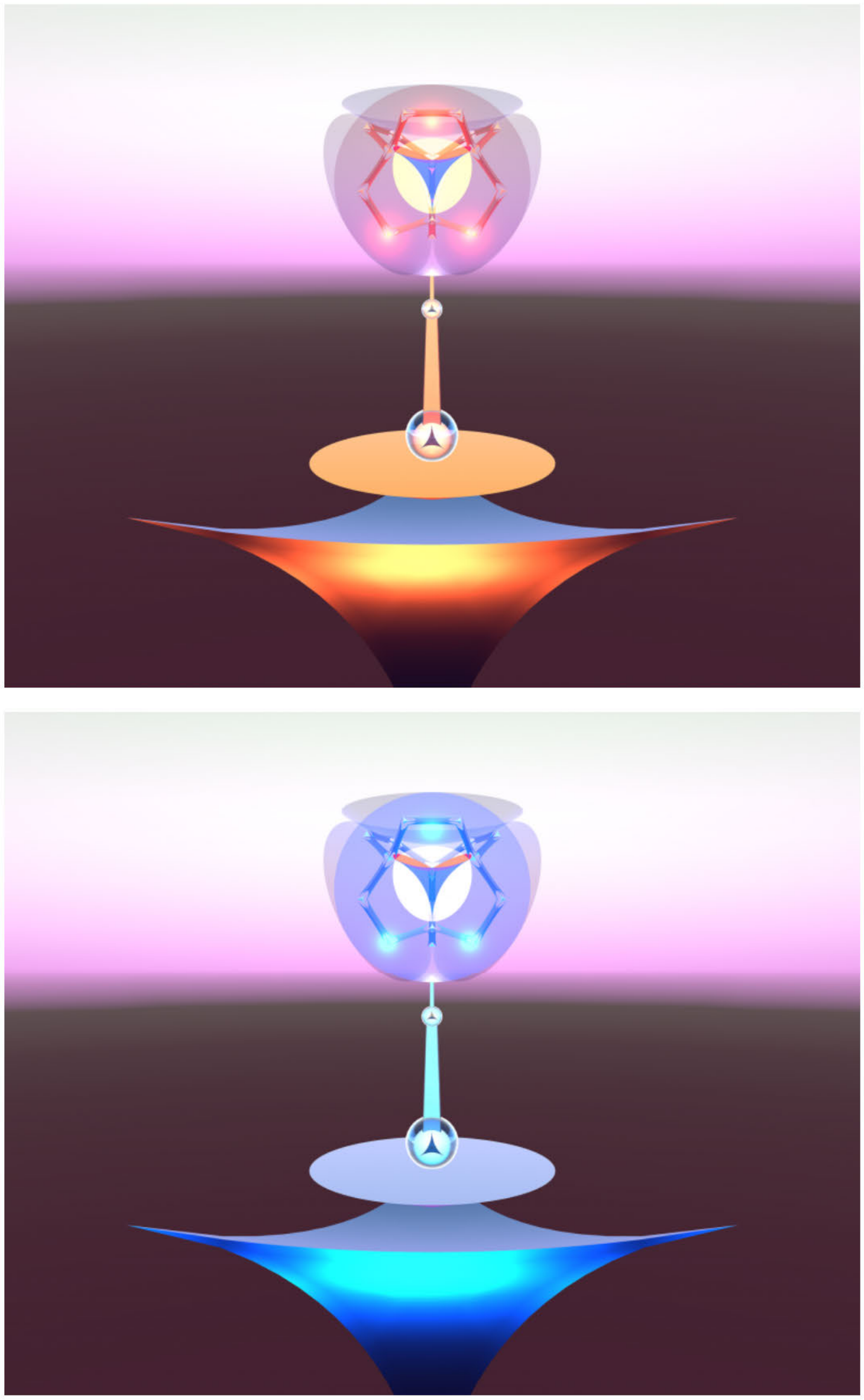

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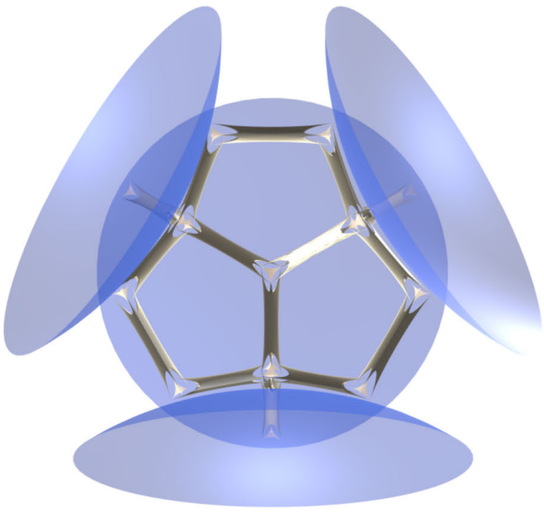

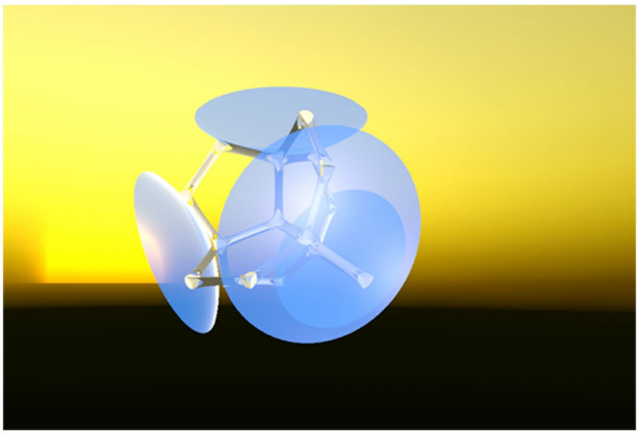

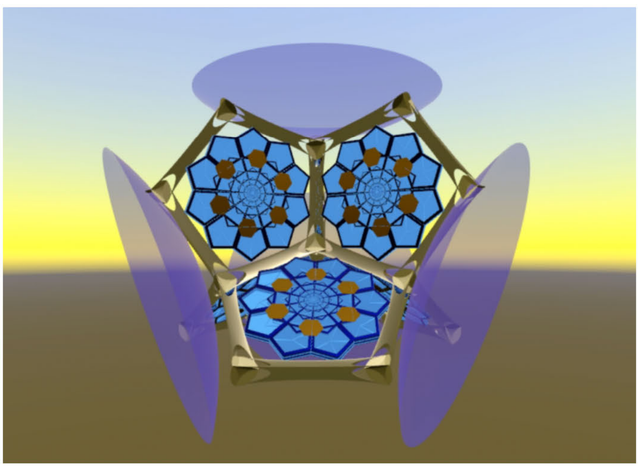

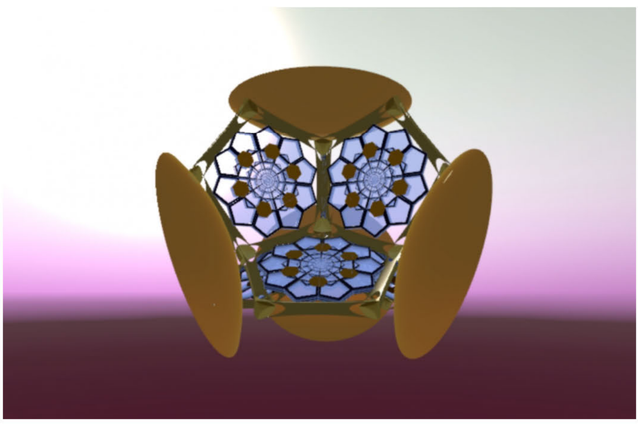

This configuration of the LInchPIn® increases the aperture to 77,760 degrees.

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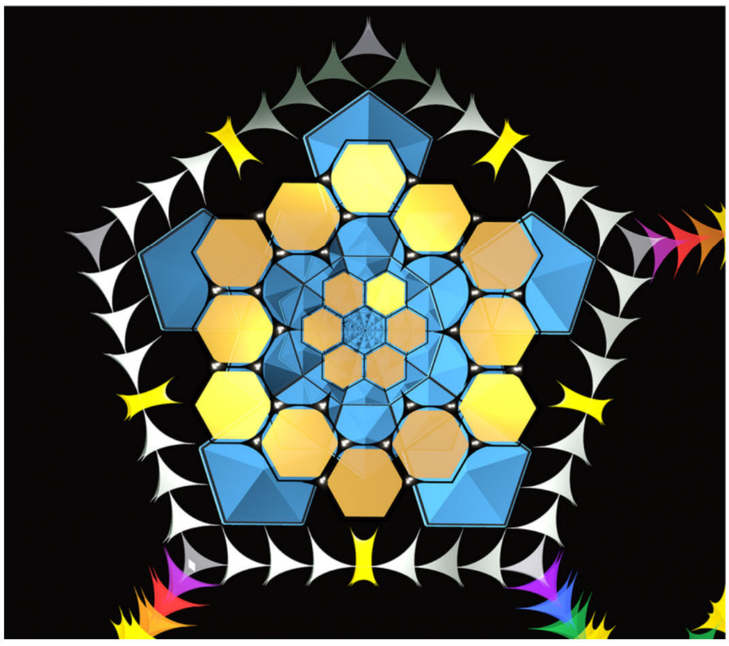
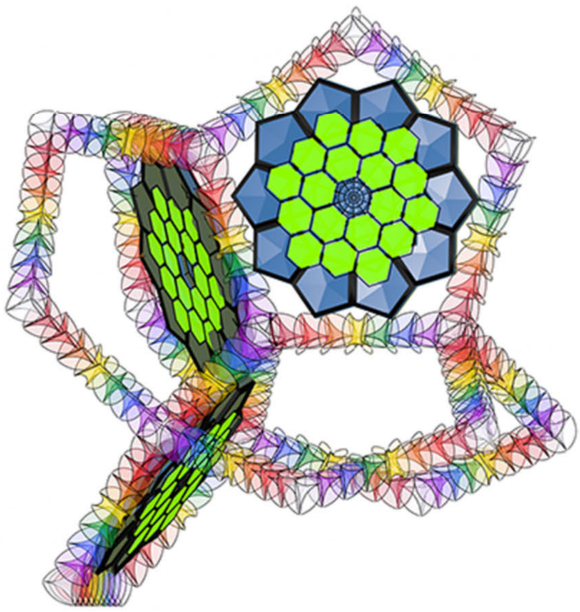
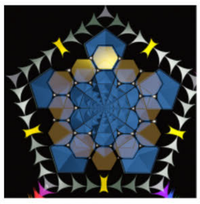
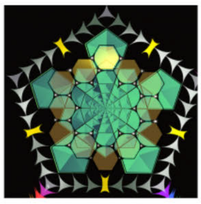
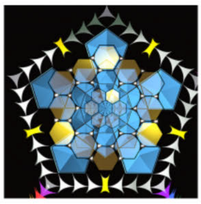




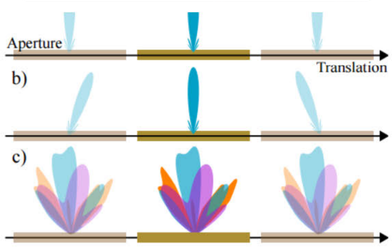






Utilizing emergent technologies, each facet behaves as an independent lens calibrating an incoming wavelet.

Metamaterials reinventing 3-D Radar Imaging



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Wave Congugations - Orbital Angular Momentum

Electron Vortex Beams with High Quanta of Orbital Angular Momentum

Benjamin J. McMorran[1,*], Amit Agrawal[1,2], Ian M. Anderson[3], Andrew A. Herzing[3], Henri J. Lezec[1], Jabe...
See all authors and affiliations

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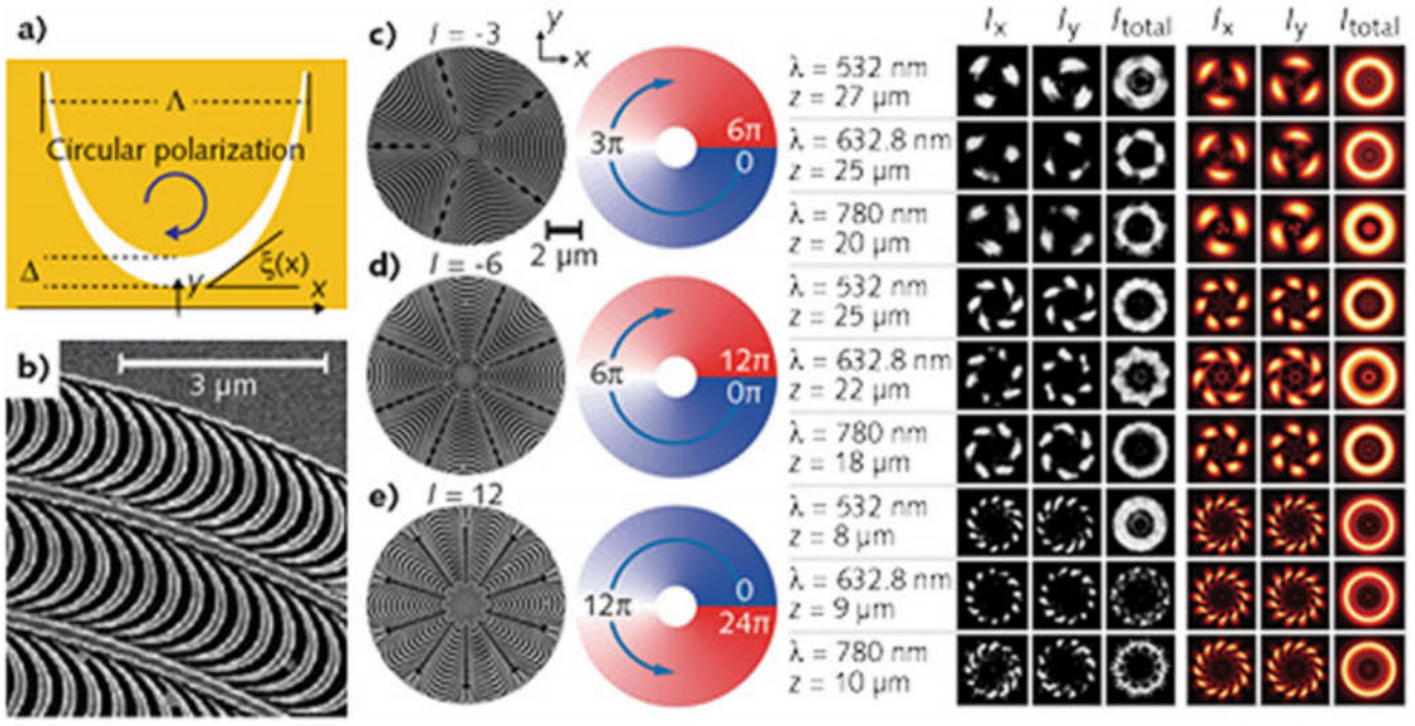
Vol. 331, Issue 6014, pp. 192-195
DOI: 10.1126/science.1198804



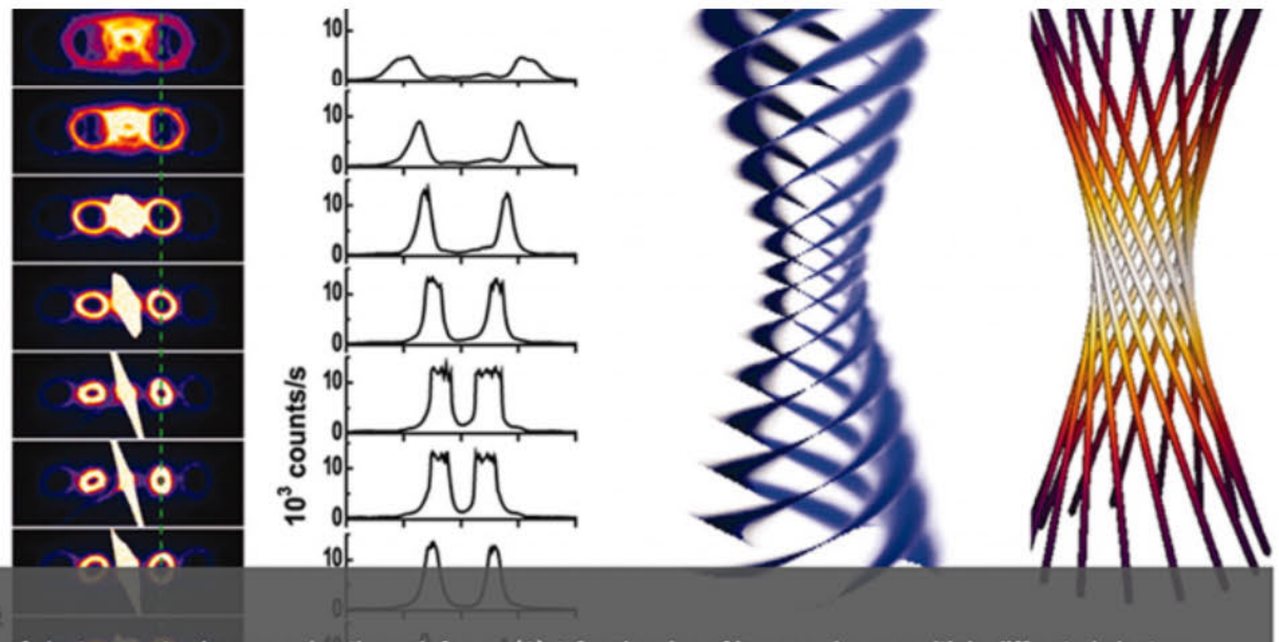


Fig. 4

Evolution of electron vortex beams going through focus. (**A**) A focal series of images shows multiple diffracted electron vortex beams going through a beam waist. The beams are produced using a grating with a dislocation of b = 15. The slanted elongation of the intense central beam near the beam waist is an artifact resulting from saturation of the CCD camera. (**B**) Line profiles though the first diffraction order [indicated by the dashed green line in (A)] clearly show the presence of a persistent central intensity node that expands from the beam waist, indicating a phase vortex and therefore OAM. (**C**) A simulation of the wavefronts and transverse amplitude of an m = 5 Laguerre-Gaussian beam going through focus illustrates the helical structure of the wavefronts. (**D**) A geometric (ray) optics model reveals that the electron vortex beam can be understood as a superposition of semiclassical straight-line trajectories.

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Determinants of Faraday Wave-Patterns in Water Samples Oscillated Vertically at a Range of Frequencies from 50-200 Hz

Merlin Sheldrake* & Rupert Sheldrake

*Corresponding author: merlinsheldrake@gmail.com

Keywords: Faraday wave, pattern formation, vibrational mode, catastrophe theory, bifurcation, analogue model, morphogenesis, parametric oscillation, nonlinear dynamic system

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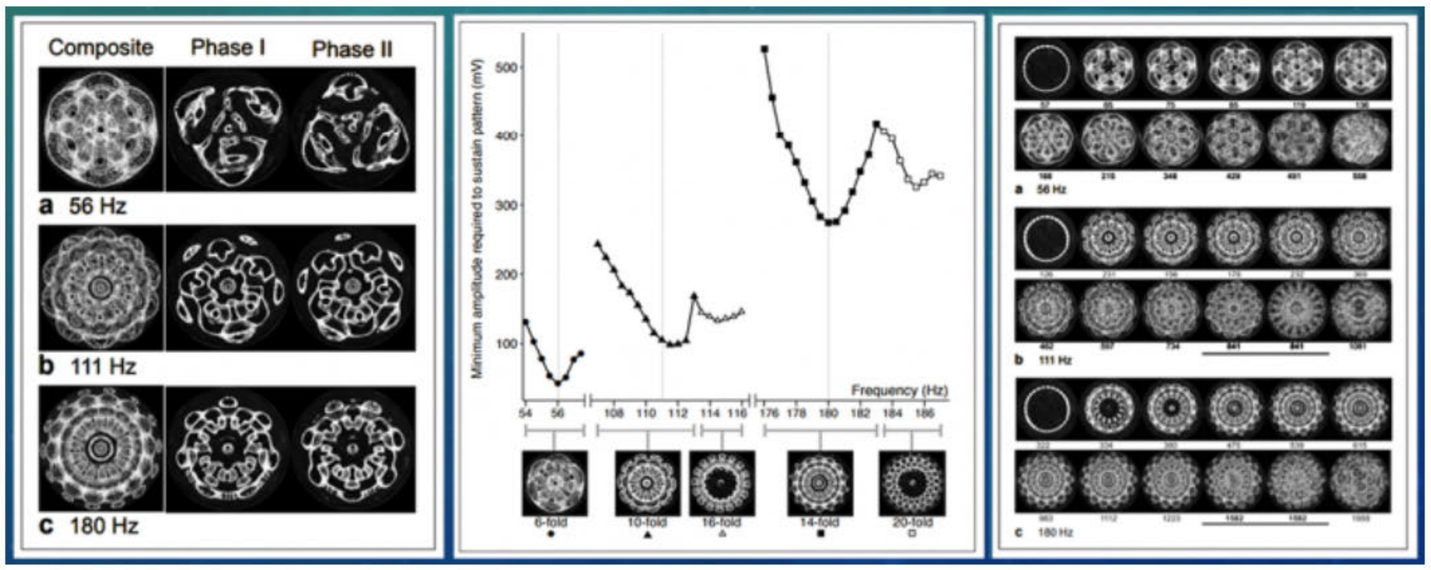
DOI: 10.14294/WATER.2017.6



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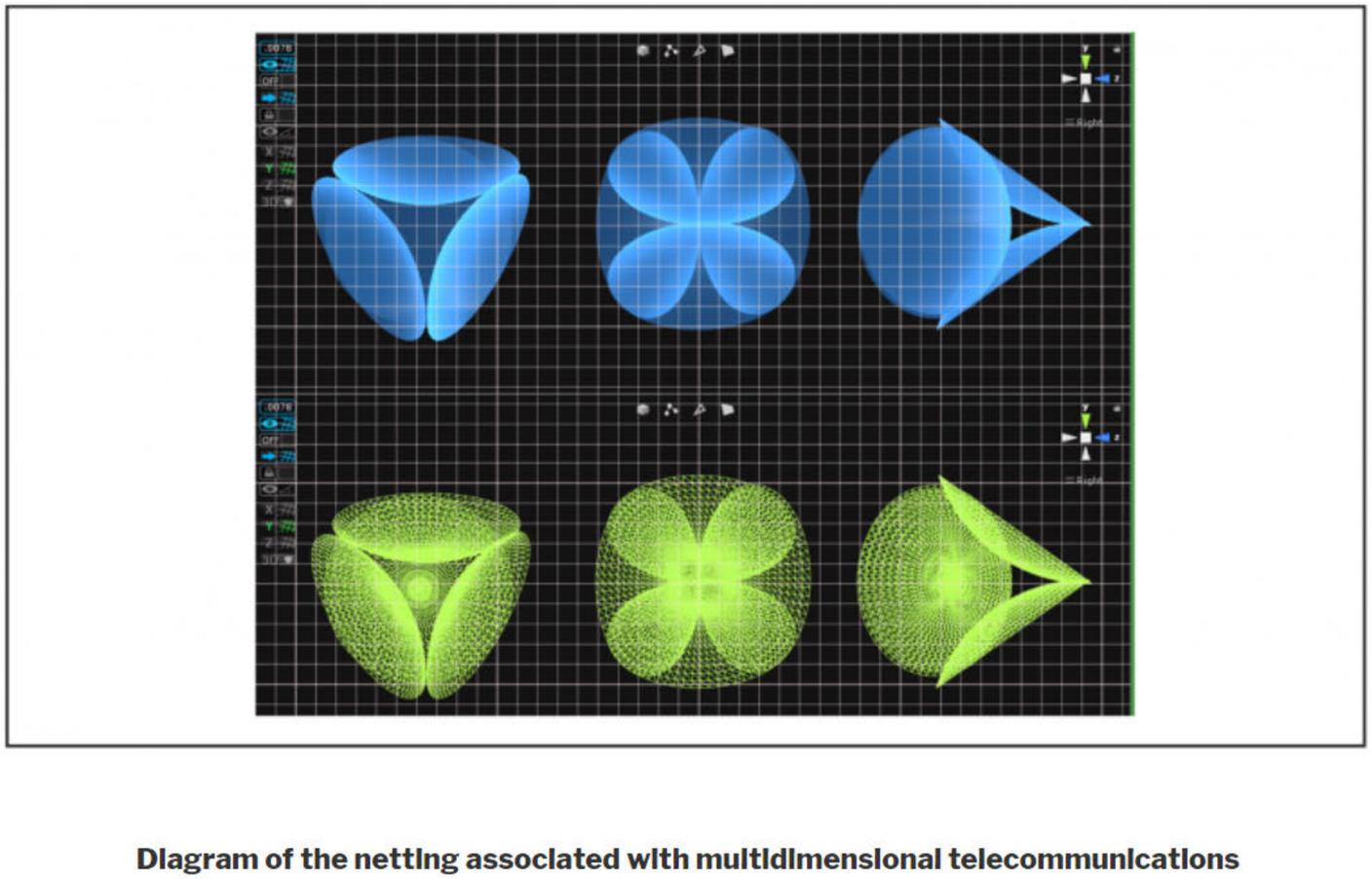

Diagram of the netting associated with multidimensional telecommunications

11

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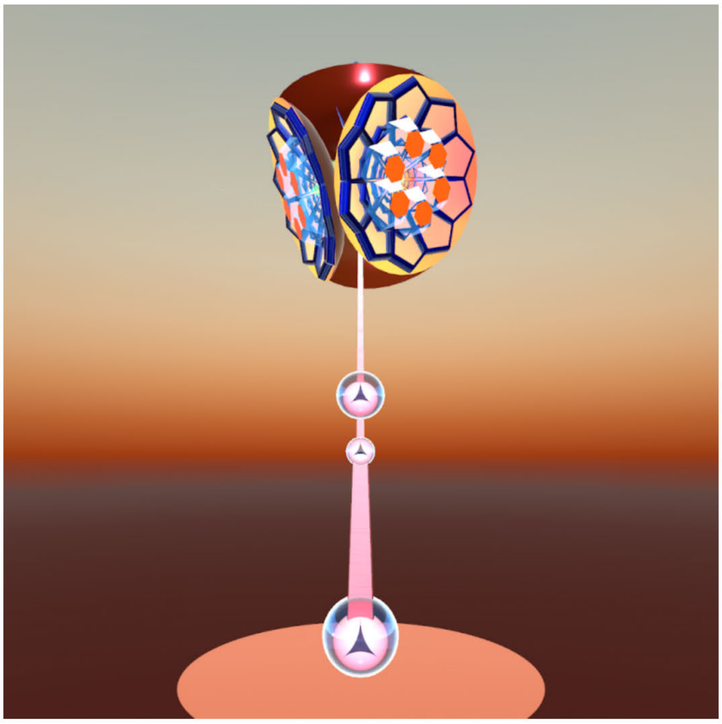

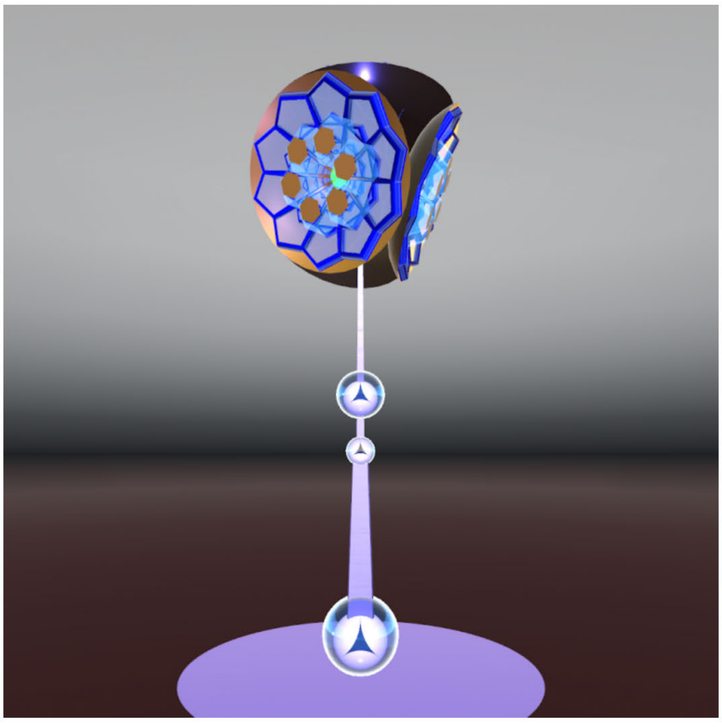

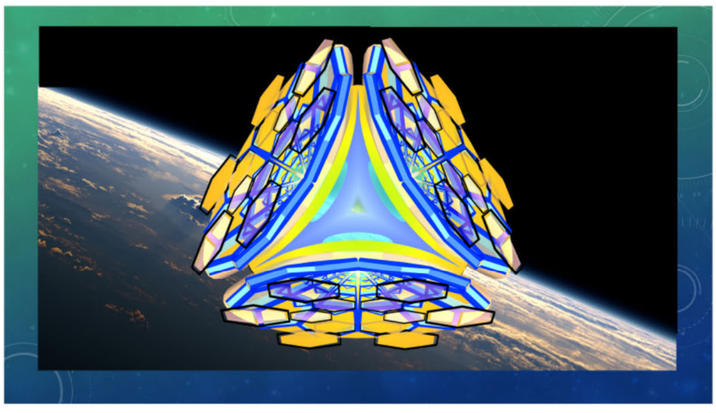

A terrestrial configuration that could potentially function in an orbital environment.

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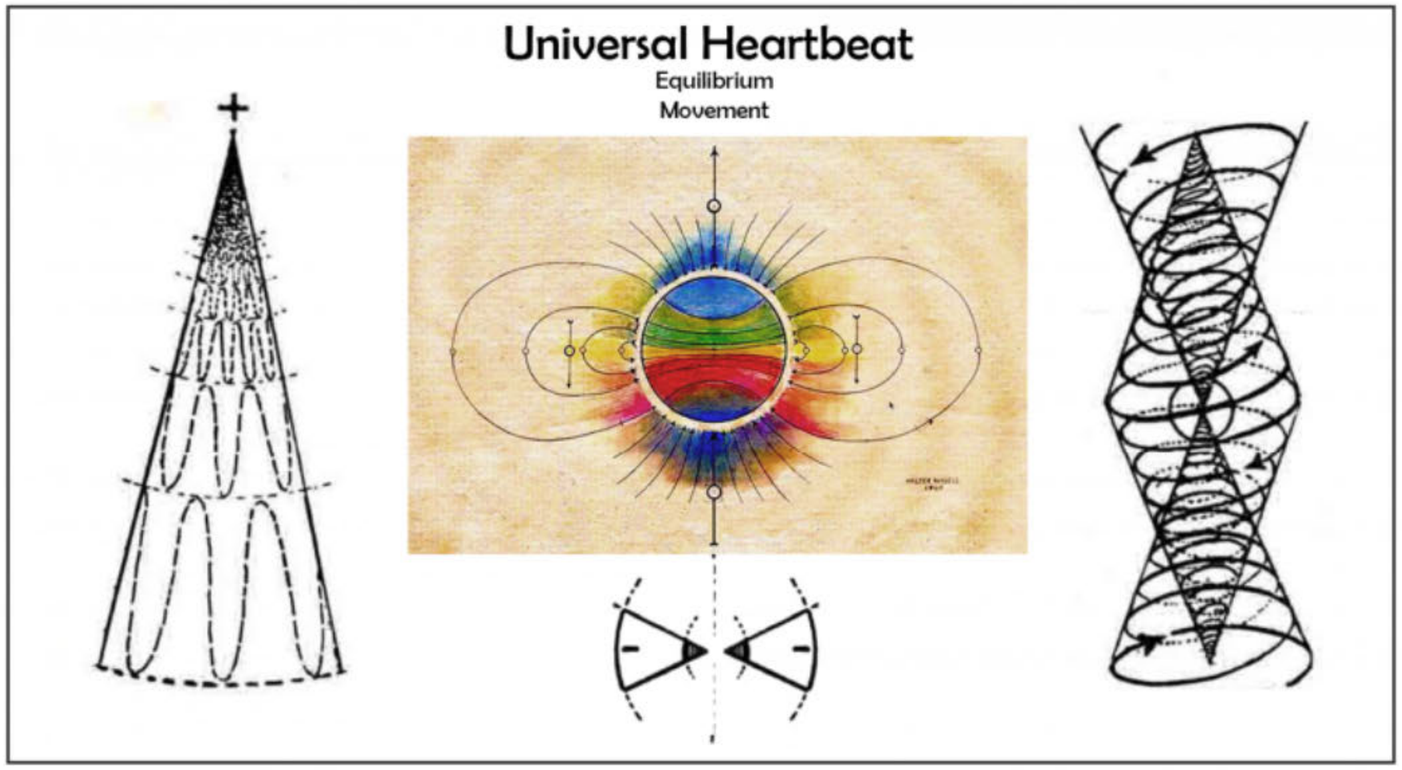

A new geometry provides a new approach for the transmission and reception of data.

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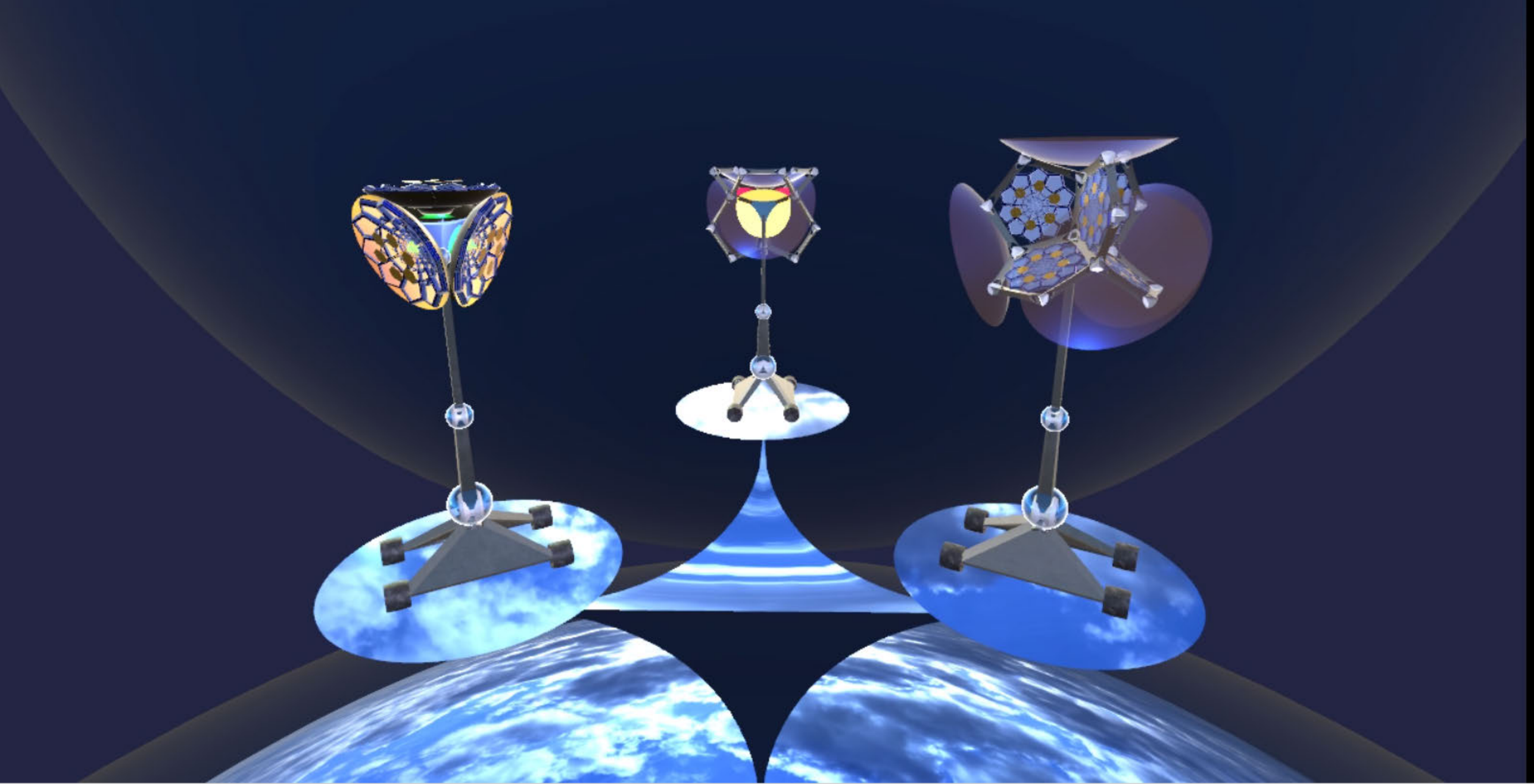
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